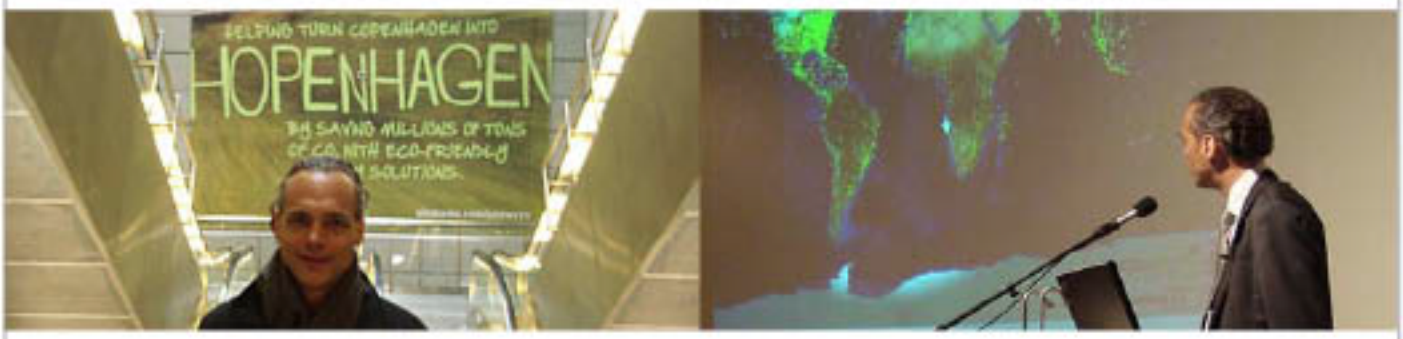
Steffen Lehmann addresses COP15 Climate Summit



By Brian Walsh, COP15 correspondent

With the world on the brink of a sudden and violent climate change, the Copenhagen Summit is the most important political gathering of our time. The Copenhagen Climate Summit involves over 100 world leaders and 30,000 delegates from 192 countries, including a wide range of personalities, not only politicians and negotiators. This series introduces some of the leading thinkers. Today: Australia-based architect and academic Steffen Lehmann, who presents on 'Cities and Climate Change' next to negotiators Yvo de Boer, Connie Hedegaard and Sir Nicholas Stern.

German-born architect Steffen Lehmann cut an unusual figure among negotiators gathered in Copenhagen to hammer out a global response to climate change. Professor Lehmann, the holder of the prestigious UNESCO Chair in Sustainable Urban Development for the Asia-Pacific region, addressed with passion and vigour a large audience of politicians and experts at the United Nations Framework Convention on Climate Change. The COP15 forum is considered to be a crucial opportunity for nations in demonstrating their commitment to addressing the potential impact of global warming.

Professor Lehmann told me that he has presented strategies for energy-efficient urban design at over 300 conferences in the last fifteen years. In his presentation in Copenhagen, he pointed out that future architectural teaching will need to adopt an environmentally-conscious design focus, drawing on the latest interdisciplinary research, in order to equip students in architecture and planning with the necessary knowledge to establish sustainable design principles. 'The serious challenge of a low carbon future cannot stop outside the academy. This is essential, and I believe it can be done', Professor Lehmann said, noting that a shift had already occurred at many universities worldwide.

He also said that the poorest nations needed to have access to funds and technological assistance if they were to be able to adapt to the consequences of climate change. 'This includes new additional funds and green technology transfer, to help poor countries and small island states to adapt to the climate change impact and to stop deforestation. Doing nothing or too little is simply not an option. However, I believe that the proposed emission cuts are not going far enough. We need to act quickly: We have maybe five to eight years left to turn an upward emissions trend into a downturn emissions trend. It's also a moral issue'. In particular, he pointed towards fears for food security, to the fact that the world's food resources continued to shrink while global population grew and water scarcity increased. 'One solution', he said, 'could be to raise the productivity of underused land and rooftops to introduce urban farming concepts into urban design.'

It seems the impact of climate change on the developing world is in many areas already so far advanced

it can no longer be prevented; only mitigated.
We can see this in the increased frequency of flooding in Bangladesh, strong storms in coastal areas, and the desertification of sub-Saharan Africa. 'The question with financial assistance will be, how one can monitor and verify that all countries are following through on their emissions-reductions promises', he added.

The relationship between urbanization and climate change is a relatively new research area. Cities are now understood to be a primary field of action, since sustainability measures will have their biggest impact in this context. In his address, Professor Lehmann discussed a sustainable model where city districts were mixed-use, were more compact and had a strong focus on public transport. He mentioned Singapore, Barcelona and Stockholm as prime examples. He also cited German examples of retrofitting existing buildings and entire districts, and their success in reducing energy, water use and the amount of waste created, while also moving from a traditional fossil fuel based infrastructure to a greener energy mix, with decentralized, distributed power systems.

Steffen Lehmann also raised concerns about his country of residence: 'Australia is a key player in the fossil fuel industry, with a huge reliance on coal. It has one of the highest per capita emission levels in the world. However, Australia offers so far only low targets with lots of strings attached' he said.

Dr. Lehmann pointed out that China, the world's largest emitter of greenhouse gases, has set ambitious goals on renewable energy and is now spending more than any other country on clean energy development. It is estimated that by 2012, it is expected that China will become the world's biggest producer of wind energy. He said 'I think it's fantastic that despite the global financial crisis, climate is still at the forefront of every government's mind.'
Lehmann is active as consultant to governments and cities in the Asia Pacific region and Middle East. He currently prepares an international conference on sustainable architecture for next July in Jordan's capital Amman.

UN Secretary-General Ban Ki Moon has made a new climate treaty his top priority and said he is optimistic that a full and legally binding treaty to slow global warming could be agreed in the coming months, early 2010.

Image: Dr. Steffen Lehmann speaking at COP15 in Copenhagen, on 11th December 2009